



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT

In re application of: GAO et al.

Serial No.: 10/673,433

Group Art Unit: 2171

Filed: 9/30/2003

Examiner: Unknown

Title: *ESTIMATING THE COMPILATION TIME OF A QUERY OPTIMIZER*

Commissioner of Patents  
and Trademarks  
Washington, DC 20231

Sir:

Applicant is aware of the following references listed below, copies of which are enclosed:

LITERATURE

“Heuristic Method for Joining Relational Data Base Tables,” *IBM Technical Disclosure Bulletin*, February 1988, pgs. 8-11.

“Statistical Synopses for Graph-Structured XML Databases,” *ACM SIGMOD*, June 4-6, 2002, Madison, Wisconsin, pgs. 358-369.

“Query Processing and Optimization in Oracle Rdb,” *The VLDB Journal*, 1996, pgs. 229-237.

“A Comparison of Selectivity Estimators for Range Queries on Metric Attributes,” *ACM SIGMOD*, 1999, pgs. 239-250.

“Selectivity Estimation for Spatio-Temporal Queries to Moving Objects,” *ACM SIGMOD*, June 4-6, 2002, Madison Wisconsin, pgs. 440-451.

“Optimization of Large Join Queries: Combining Heuristics and Combinatorial Techniques,” *ACM SIGMOD*, 1989, pgs. 367-376.

“Randomized Algorithms for Optimizing Large Join Queries,” *ACM SIGMOD*, 1990, pgs. 312-321.


“Adaptive Access Plan for Select Queries with Multiple Predicates,” *IBM Technical Disclosure Bulletin*, V32, N8B, January 1990, pgs. 6-10.

“Integrated Buffer Management and Query Optimization Strategy for Relational Databases,” *IBM Technical Disclosure Bulletin*, V32, N12, May 1990, pgs. 253-257.

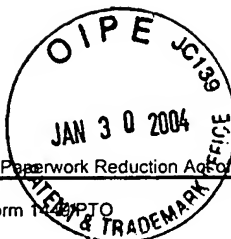
“Estimating Compilation Time of a Query Optimizer,” *ACM SIGMOD*, June 9-12, 2003, San Diego, California, 12pgs.

The above-listed references are, in the belief and opinion of the undersigned, the closest art of which the applicant is aware as of the date of execution of the Declaration in the above-captioned application.

Respectfully submitted  
By Applicant's Representative,

  
Ramraj Soundararajan  
Registration No. 53,832

Lacasse & Associates, LLC  
1725 Duke Street  
Suite 650  
Alexandria, VA 22314  
(703) 838-7683



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Substitute for form 1449 PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/673,433
Filing Date	09/30/2003
First Named Inventor	Dengfeng GAO
Art Unit	2171
Examiner Name	Unknown
Attorney Docket Number	ARC920030045US1

Sheet 1 of 1

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		"Heuristic Method for Joining Relational Data Base Tables," IBM Technical Disclosure Bulletin, 2/1988, pp. 8-11.	
		POLYZOTIS ET AL., "Statistical Synopses for Graph-Structured XML Databases," ACM SIGMOD, June 4-6, 2002, Madison, Wisconsin, pgs. 358-69.	
		ANTOSHENKOV ET AL., "Query Processing and Optimization in Oracle Rdb," The VLDB Journal, 1996, pgs. 229-37.	
		BLOHSFELD ET AL., "A Comparison of Selectivity Estimators for Range Queries on Metric Attributes," ACM SIGMOD, 1999, Philadelphia, PA, pgs. 239-50.	
		CHOI ET AL., "Selectivity Estimation for Spatio-Temporal Queries to Moving Objects," ACM SIGMOD, June 4-6, 2002, Madison, Wisconsin, pgs. 440-51.	
		SWAMI, "Optimization of Large Join Queries: Combining Heuristics and Combinational Techniques," ACM SIGMOD, 1989, pgs. 367-76.	
		IOANNIDIS ET AL., "Randomized Algorithms for Optimizing Large Join Queries," ACM SIGMOD, 1990, pgs. 312-21.	
		"Adaptive Access Plan for Select Queries with Multiple Predicates," IBM Technical Disclosure Bulletin, V32, N8B, 1/1990, pgs. 6-10.	
		"Integrated Buffer Management and Query Optimization Strategy for Relational Databases," IBM Technical Disclosure Bulletin, V32, N12, 5/1990, pgs. 253-57.	
		IYYAS ET AL., "Estimating Compilation Time of a Query Optimizer," ACM SIGMOD, June 9-12, 2003, San Diego, California, 12pgs.	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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